

# Therapeutic Services

2017-18 Program of Study	Level 1	Level 2	Level 3	Level 4
Therapeutic Services	Health Science Education (5998)	Anatomy and Physiology (3251 or 5991) -or- Dental Science (6134) -or-Pharmacological Science (6133) -or- Nutrition Science and Diet Therapy (6007) -or- Medical Therapeutics (5999)	-or-Pharmacological Science (6133) -or- Nutrition Science and Diet Therapy (6007) -or-	Clinical Internship (5993) -or- <b>Dual Enrollment</b> Therapeutic Services (4101)
			Industry Certification following 6133 AND 5993: Certified Pharmacy Technician	Industry Certification following 5999 AND 5993: Certified Clinical Medical Assistant

# **Description**

**Therapeutic Services** is designed to prepare students to pursue careers in fields of dentistry, pharmacology, nutrition, or rehabilitation. Upon completion of this program, a proficient student will be able to identify careers in therapeutic clinical services; assess, monitor, evaluate, and report patient/client health status; and identify the purpose and components of treatments. Students have the opportunity to take part in a clinical internship at the end of this program of study along with optional testing for either the Certified Pharmacy Technician or Certified Clinical Medical Assistant industry certification.

# **Employment Outlook**

The Bureau of Labor Statistics projects most of the job openings in occupations assigned to the health sciences cluster to be in the therapeutic services pathway. The therapeutic careers can be further broken down into groups of related occupations; i.e., rehabilitation such as physical and respiratory therapies, dental, pharmacological, and nutritional services. Each of these areas have projected positive growth from 2014-2024 with medical assistants, dental assistants, and pharmacy technicians projected to have the largest number of openings, see **Figures 1 & 3**. This is especially important, because students can enter these areas with a certificate obtained in either secondary or postsecondary settings. Also, each of these entry level positions can serve as on ramps to associate and bachelor's degree programs in each of the three areas. Regarding salary, dental hygienists, physical therapy assistants, and occupational therapy assistants all have an annual median salary of over \$50,000 with an associate degree. The projected employment for these careers is 4,450, 3,630, and 920 respectively. **Figure 2** shows pharmacy technician employment concentrated in and around urban areas with no region showing employment lower than 330-551.

Figure 1. Occupational Employment & Future Employment Outlook for Tennessee <sup>5</sup>

Occupation	2014 Projected Employment	2024 Projected Employment	Total 2014 - 2024 Employment Change	Annual Avg. Percent Change	Median Salary
Massage Therapist	1630	2080	450	2.5%	\$33,390
Physical Therapy Aide	1,180	1,750	580	4.1%	\$22,940
Occupational Therapy Assistant	640	920	280	3.7%	\$60,210
Occupational Therapy Aide	130	200	70	4.3%	\$28,600
Dental Assistant	5,800	6,710	910	1.5%	\$35,450

<sup>&</sup>lt;sup>1</sup> Bureau of Labor Statistics, United States Department of Labor. (2016-17). Occupational Outlook Handbook: Clusters, pathways, and LS: Connecting Career Information. Retrieved from <a href="http://www.bls.gov/careeroutlook/2015/article/career-clusters.htm#Health sciences">http://www.bls.gov/careeroutlook/2015/article/career-clusters.htm#Health sciences</a>

<sup>&</sup>lt;sup>2</sup> CAREERwise Education. (2016). *Therapeutic Services Pathway*. Retrieved from <a href="http://www.iseek.org/careers/therapeutic-services-pathway.html">http://www.iseek.org/careers/therapeutic-services-pathway.html</a>

<sup>&</sup>lt;sup>3</sup> Tennessee Department of Labor and Workforce Development, Jobs4TN Online. (2016). Employment Wage and Data. Retrieved from <a href="https://www.jobs4tn.gov">https://www.jobs4tn.gov</a>

<sup>&</sup>lt;sup>4</sup> Tennessee Department of Labor and Workforce Development, Jobs4TN Online. (2016). Employment Wage and Data. Retrieved from <a href="https://www.jobs4tn.gov">https://www.jobs4tn.gov</a>

<sup>&</sup>lt;sup>5</sup> Tennessee Department of Labor and Workforce Development, Jobs4TN Online. (2016). Employment Wage and Data. Retrieved from <a href="https://www.jobs4tn.gov">https://www.jobs4tn.gov</a>

Dental Hygienist	3,610	4,450	840	2.1%	\$66,320
Dietetic Technician	960	1,110	150	1.5%	\$22,050
Registered Dietitian	1,200	1,490	290	2.2%	
Pharmacy Technician	11,900	14,960	3,000	2.3%	\$29,210
Medical Assistant	14,100	18,750	4,650	2.9%	\$29,500
Physical Therapist	4,700	6,690	2,220	4.0%	\$85,420
Occupational Therapist	1,860	2,510	650	3.0%	\$82,830

Figure 2. 2024 Projected employment for Pharmacy Technicians in Tennessee<sup>6</sup>



						22
331 - 550	551 - 820	821 - 1,060	1,061 - 1,440	1,441 - 2,510	2,510 - 3,320	N/A

<sup>&</sup>lt;sup>6</sup> Tennessee Department of Labor & Workforce Development, Jobs4TN Online. (2016). *Labor Supply and Demand for Tennessee*. Retrieved from <a href="https://www.jobs4tn.gov/vosnet/Default.aspx">https://www.jobs4tn.gov/vosnet/Default.aspx</a>

Figure 3. State and national trends for pharmacy technicians with positive projections 2014-247

	Employment				
National	2014	2024	Percent Change	Projected Annual Job Openings	
Pharmacy Technician	372,500	407,200	9%	7,160	
	Employment			Projected	
				Annual	
Tennessee18	2014	2024	Percent Change	Job Openings	

# **Postsecondary Opportunities**

For students interested in a therapeutic career, education paths are seamless as shown in **Figure 4.** A pharmacy tech certificate offered in high school can lead to a pre-pharmacy program at Middle and East Tennessee State Universities as well as the University of Tennessee at Knoxville. Dental assistants who receive on the job training can enter a dental assisting or dental hygiene program at Northeast State Community College or Middle Tennessee State University. Following high school graduation, a student can be trained on the job to be a dietary aide while pursuing a bachelor's degree in Nutrition. Students interested in physical/occupational therapy can be trained on the job to be a physical or occupational therapy aide, complete an associate's degree in physical or occupational therapy assisting, complete a bachelor's degree in pre-physical therapy or an occupational therapy fast track program, all here in Tennessee.

<sup>&</sup>lt;sup>7</sup> United States Department of Labor, Employment and Training Administration. (2016). *Career One Stop.* Retrieved from <a href="https://www.onetonline.org/link/summary/29-2052.00">https://www.onetonline.org/link/summary/29-2052.00</a>

Figure 4. Therapeutic Services Postsecondary Pathways

## High School Therapeutic Services Program of Study

## Therapeutic Clinical **Program of** Study

Food Server

Dietetic Technician

## Clinical Internship

#### **Early Postsecondary**

Dual credit/enrollmen t may be established with local postseconday institutions in Anatomy & Physiology.

## **Postsecondary Certificate**

# **Certificate or Diploma**

Chattanooga, Roane, SW TN, Walters State Community Colleges, and TCAT's in Jackson, Knoxville, Murfreesboro, and Oneida

#### **Dental Assistant**

**TCAT Memphis** Volunteer State Community College

# **Pharmacy Tech Associate Degree**

## A.A.S. Dental Hygiene

Northeast, Chattanooga, Roane State Community Colleges TSU

#### A.A.S. **Physical** Therapy Assistant

lackson and Roane State Community Colleges

## A.A.S. **Occupational Therapy Assistant**

lackson and Walters State Community Colleges

## **Bachelor's** Degree

Pre-Dental, Pre-Dental Hygiene, **Pre-Pharmacy** MTSU, TTU, UT

## B.S. Health and Human **Performance UT Martin Austin Peay State**

# **B.S. Dental** Hygiene

TSU and ETSU

## **Advanced** Degrees: Ph.D. Physical **Therapy ETSU** TSU **UT Memphis**

# Ph.D. Occupational **Therapy**

**TSU UT Memphis UT** Chattanooga

#### **High School Diploma**

• Dietetic Technician (\$17,210-\$29,000)

#### Certificate

- Pharmacy Technician (\$22,450-\$34,050)
- Dental Assistant (\$25,910-\$40,170)
- Medical Assistant (\$23,650-33,920)
- Massage Therapist (\$19,810-\$42,970)

## Associate Degree

- Dental Hygienist (\$49,220-\$73,470)
- Occupational Therapy Assistant (\$50,100-\$65,500)

## Bachelor's Degree

- Dental Hygienist (\$49,220-\$73,470)
- Physical Therapist (\$66,360-\$98,120)
- Occupational Therapist (\$59,730-\$94,130)

# **Current Secondary Landscape**

In the 2015-16 school year, 116 schools in Tennessee offered courses in the Therapeutic Services program of study. Of the 13,624 students who were enrolled in a Health Science course, 7,287 students were enrolled in level three courses. The number of schools offering the Therapeutic Services program of study has increased over the past four years. **Figure 6** shows the open enrollment analysis for SY 2014-15 to 2017-18 as well student enrollment for school years 2014-15 through 2016-17 in the Therapeutic Services POS.

Figure 5. Open Enrollment Analysis<sup>8</sup>

SY	Therapeutic Services
2013-14	No data
2014-15	110
2015-16	116
2016-17	138
2017-18	172

#### Student Enrollment

SY	Health Science Education	Medical Therapeutics	Pharmacological Science	Nutrition Science & Diet Therapy	Dental Science	Anatomy & Physiology
2013-14	13622	6976	0	163	0	3914
2014-15	13624	6956	198	1237	44	3782
2015-16	14563	6986	272	1153	29	3990

#### Therapeutic Services Concentrators

SY	Therapeutic Services Concentrators
2013-14	879
2014-15	1721
2015-16	2113

<sup>&</sup>lt;sup>8</sup> Tennessee Department of Education. (2017). *Student Enrollment Data*. Retrieved from Author's calculation of student enrollment data.



## **Recommendations**

Due to the lack of a course to prepare students for the CCMA exam, I recommend two years of research to determine if students are well prepared for the CCMA exam by completing the POS as written.

No other recommendations at this time.

2018-19 Program of Study	Level 1	Level 2	Level 3	Level 4
Therapeutic Services	Health Science Education (5998)	Anatomy and Physiology (3251 or 5991) -or- Dental Science (6134) -or-Pharmacological Science (6133) -or- Nutrition Science and Diet Therapy (6007) -or- Medical Therapeutics (5999)	Anatomy and Physiology (3251 or 5991) -or- Dental Science (6134) -or-Pharmacological Science (6133) -or- Nutrition Science and Diet Therapy (6007) -or- Medical Therapeutics (5999) -or- <b>Dual Enrollment</b> Therapeutic Services (4101)	Clinical Internship (5993) -or- <b>Dual Enrollment</b> Therapeutic Services (4101)
			Industry Certification following 6133 AND 5993: Certified Pharmacy Technician	Industry Certification following 5999 AND 5993: Certified Clinical Medical Assistant



## References

- Bureau of Labor Statistics, United States Department of Labor. (2016-17). Occupational Outlook Handbook: Clusters, pathways, and LS: Connecting Career Information. Retrieved from <a href="http://www.bls.gov/careeroutlook/2015/article/career-clusters.htm#Health sciences">http://www.bls.gov/careeroutlook/2015/article/career-clusters.htm#Health sciences</a>
- CAREERwise Education. (2016). Therapeutic Services Pathway. Retrieved from <a href="http://www.iseek.org/careers/therapeutic-services-pathway.html">http://www.iseek.org/careers/therapeutic-services-pathway.html</a>
- Tennessee Department of Education. (2015). Student Enrollment Data. Retrieved from Author's calculation of student enrollment data.
- Tennessee Department of Labor and Workforce Development, Jobs4TN Online. (2016). Employment Wage and Data. Retrieved from <a href="https://www.jobs4tn.gov">https://www.jobs4tn.gov</a>
- Tennessee Department of Labor & Workforce Development, Jobs4TN Online. (2016). *Employment Wage and Data*. Retrieved from <a href="https://www.jobs4tn.gov/vosnet/analyzer/results.aspx?session=occproj">https://www.jobs4tn.gov/vosnet/analyzer/results.aspx?session=occproj</a>
- Tennessee Department of Labor & Workforce Development, Jobs4TN Online. (2016). *Labor Supply and Demand for Tennessee*. Retrieved from <a href="https://www.jobs4tn.gov/vosnet/Default.aspx">https://www.jobs4tn.gov/vosnet/Default.aspx</a>
- United States Department of Labor, Employment and Training Administration. (2016). *Career One Stop.* Retrieved from <a href="https://www.onetonline.org/link/summary/29-2052.00">https://www.onetonline.org/link/summary/29-2052.00</a>